



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/625,859	07/22/2003	Vladimir Stoilkovic	38105.830027.US1	7994
26582	7590	12/02/2004	EXAMINER	
HOLLAND & HART, LLP 555 17TH STREET, SUITE 3200 DENVER, CO 80201			ALEMU, EPHREM	
			ART UNIT	PAPER NUMBER
			2821	

DATE MAILED: 12/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/625,859

Applicant(s)

STOILJKOVIC ET AL.

Examiner

Ephrem Alemu

Art Unit

2821

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>7-22-03</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Specification*

1. The disclosure is objected to because of the following informalities: In page 2, line 5, insert the US patent No. --6,618,014--. Appropriate correction is required.

### *Double Patenting*

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1-20 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-9 of U.S. Patent No. 6,618,014. Although the conflicting claims are not identical, they are not patentably distinct from each other because both the instant application and the issued patent claim an integral antenna and radio unit for a wireless communication device including a printed circuit board (PCB), comprising a radio module and an antenna module and carrier. The only obvious difference between the instant application and the issued patent is that the "carrier" claimed in the issued patent '014 is claimed as "means for prohibiting direct connection between the radio module and antenna module" in the instant application

Art Unit: 2821

which is an inherent and/or obvious variation to the “carrier” claimed in the issued patent '014.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1,2, 11, 12 and 14-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Orchard et al. (US 6,014,113).

Re claims 1 and 11, Orchard discloses an integral antenna and radio unit (i.e., antenna assembly) for a wireless communication device including a printed circuit board (PCB) (6) (Figs. 7-9; abstract), comprising:

a radio module (i.e., electronic component 9) comprising a first RF connection (i.e., bottom end of electronic component 9 (synthesizer 9a)) to a PCB (6), the radio module being secured to the PCB (Figs. 7, 8; Col. 4, lines 7-46); and

an antenna module (i.e., antenna 1) comprising a second RF connection (i.e., sprung pin 5) to the PCB (6), the antenna module being removably secured to the radio module; wherein the radio module and the antenna module are not directly RF connected (that is the antenna module (i.e., antenna 1) and radio module (i.e., electronic component 9) are connected via feed pad 7) (Figs. 7-9; Col. 3, lines 1-15; Col. 3, line 58- Col. 4, line 9; wherein the second RF connection is formed by at least one contact pin (i.e., sprung pin 5)).

Art Unit: 2821

Re claim 2, Orchard further discloses the radio module (i.e., electronic component 9) comprises a radio chip (i.e., synthesizer 9a) and a shielding cover (8) extending over the radio chip (i.e., synthesizer 9a; Col. 4, lines 40-43).

Re claim 12, Orchard further discloses the second RF connection is formed by at least a feed contact and a shorting contact (i.e., through holes 11a, 11b) (Fig. 2d; Col. 4, lines 10-39).

Re claims 14-16, Orchard further discloses the antenna module (1) comprises a non-conductive carrier (i.e., core 10 and/or lower cover 8) separating the radio module (i.e., electronic component 9) and the antenna module (i.e., antenna 1); wherein the carrier (i.e., core 10 and/or lower cover 8) comprises at least an RF insulating material or an RF dielectric material (Figs. 7-9; Col. 4, lines 10-46) (Figs. 7-9; Col. 4, lines 10-46).

Re claim 17, Orchard discloses an integral antenna and radio unit (i.e., antenna assembly) for a wireless communication device including a printed circuit board (PCB) (6) (Figs. 7-9; abstract), comprising:

a radio module (i.e., electronic component 9) comprising a first RF connection (i.e., bottom end of electronic component 9 (synthesizer 9a)) to a PCB (6), the radio module being secured to the PCB (Figs. 7, 8; Col. 2, lines 19-33; Col. 4, lines 7-46); and

an antenna module (i.e., antenna 1) comprising a second RF connection (i.e., sprung pin 5) to the PCB (6), the antenna module being removably secured to the radio module (Figs. 7-9; Col. 3, lines 1-15; Col. 3, line 58- Col. 4, line 9); and

Art Unit: 2821

means for prohibiting (i.e., core 10 and/or lower cover 8) a direct RF connection between the radio module and the antenna module (Figs. 7-9; Col. 4, lines 10-46).

Re claims 18-19, Orchard further discloses the means for prohibiting (i.e., core 10 and/or lower cover 8) comprises at least an RF insulating material or an RF dielectric material (Figs. 7-9; Col. 4, lines 10-46).

Re claim 20, Orchard further discloses the antenna module (1) comprises a carrier (i.e., core 10 and/or lower cover 8); the carrier forming the means for prohibiting (i.e., core 10 and/or lower cover 8) (Figs. 7-9; Col. 4, lines 10-46).

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Op't Eynde et al. (US 2001/0052645); Kurz et al. (US 6,392,603); and Hagstrom (US 5,903,820); also teach similar inventive subject matter.

### ***Correspondence***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ephrem Alemu whose telephone number is (571) 272-1818. The examiner can normally be reached on M-F Flex hours.

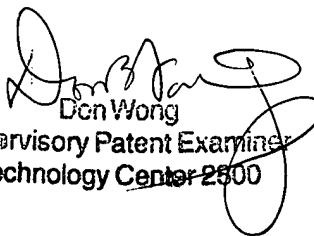
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don K Wong can be reached on (571) 272-1834. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

Art Unit: 2821

published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EA  
11-27-04

  
Don Wong  
Supervisory Patent Examiner  
Technology Center 2800